# Objective Force Disciplines: Making Army Transformation a Reality

A Monograph by MAJ J. Michael Scott Aviation



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#### **ABSTRACT**

OBJECTIVE FORCE DISCIPLINES: MAKING ARMY TRANSFORMATION A REALITY by MAJ J. Michael Scott, Aviation, 52 pages.

This monograph explores the validity of current United States Army Doctrine as it relates to enabling the future United States Army Objective Force in achieving the qualities outlined in the 2001 Objective Force White Paper as the Army begins its "transformation". Specifically, adaptability and agility are hallmark qualities of learning organizations and as such, the monograph further examines whether soldier and unit performance reflect these learning disciplines. Generative learning disciplines must exist within The Army and its culture if it is to dominate and win across the full spectrum of conflict.

The monograph opens by examining the necessity of the Army becoming a learning organization. The evolving operational environment is increasingly complex requiring adaptive forces using simpler solutions and achieving decisive action quicker than the opponent. Learning organizations have these qualities and more. From there, a hypothetical learning model outlining the "Objective Force Disciplines", while taking into account learning theory and Objective Force concepts, serves as a benchmark for comparison. Next, these "new" disciplines measure up against the recent *NTC Trends Compendium* (May 2001) and *The Army Training and Leader Development Panel Officer Study* (June 2001) determining whether current doctrine is capable in making the Objective Force a reality.

The problems found with current doctrine as it relates to the Objective Force Disciplines revolve around Army culture and overwhelming amounts of data. The current Army culture is not able to cultivate the generative learning qualities because soldiers and leaders struggle with high tempo, mistrust, and micromanagement. These issues manifest themselves in sinking commitment levels to the unit. Learning organizations need commitment to function. In addition, units are unable to make decisions in a timely manner due to a growing misunderstanding and mismanagement of overwhelming data. Consequently, units will never achieve the "decision dominance" that leads to decisive action unless knowledge, understanding and a new kind of leadership evolve. The proposed Objective Force Disciplines embody the traits of a learning organization and can solve these problems.

The monograph concludes by first recommending that the Army adopt the Objective Force Disciplines now and incorporate their principles into FM 1-0, FM 3-0, FM 25-100, FM 100-6, FM 101-5. Second, Line of Operation Seven (LO7) in the Army Transformation Campaign Plan should revisit the doctrine overhaul and include changes reflecting the "true" Objective Force capabilities. Finally, the Army must change the definition of information and the associated role it plays in decision-making. In all, the Army needs more command and less control, as it becomes a learning organization thus making Army Transformation a reality.

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## DOES THE OBJECTIVE FORCE NEED TO BECOME A LEARNING ORGANIZATION?

Organizations that are capable of learning and implementing necessary systemic change are most likely to achieve success in today's global environment. Changing a system, process or underlying principle should result in an improvement. Otherwise, the effort expended is wasted. The Army is an organization facing change in a complex world. Touched off by an operational shortfall of combat power during the opening days of Operation DESERT SHIELD, and more recently Task Force HAWK's slow deployment to Albania, Army Chief of Staff General Shinseki directed on 12 October, 1999 that the United States Army transform its force into the "Objective Force". The operational environment the Army and the Objective Force will fight in is different. The Quadrennial Defense Review of 2001 recognizes the new complex environment and emphasizes that the United Sates will likely "be challenged by adversaries who possess a wide range of capabilities, including asymmetric approaches to warfare, particularly weapons of mass destruction." Gone are the days of the predictable enemy and the Cold War. The recent events of September 11, 2001 serve as an eerie reminder of such an adversary. As such, the United States Army and its future Objective Force will now operate in an already complex global environment. Thomas L. Friedman best characterizes this global or globalized arena as:

"the inexorable integration of markets, nation-states and technologies to a degree never witnessed before—in a way that is enabling individuals, corporations and nation-states to reach around the world farther, faster, deeper and cheaper than ever before, and in a way that is enabling the world to reach into individuals, corporations and nation-states farther, faster, deeper, cheaper than ever before."

How will the Army survive in such a world? The United States Army and the emerging

Objective Force must have predictive and adaptive qualities; these qualities describe the learning

<sup>&</sup>lt;sup>1</sup> Shinseki, Eric, "The Future of War: An Interview with General Eric K. Shinseki," Internet, <a href="http://www.pbs.org/wgbh/pages/frontline/shows/future/interviews/shinseki.html">http://www.pbs.org/wgbh/pages/frontline/shows/future/interviews/shinseki.html</a> accessed 7 November 2001, p. 1-24.

<sup>&</sup>lt;sup>2</sup> Department of Defense, *Quadrennial Defense Review Report*, (Washington D.C.: Government Printing Office, 2001), p. 3.

<sup>&</sup>lt;sup>3</sup> Friedman, Thomas L. *The Lexus and the Olive Tree*. (New York: Random House, 2000), p. 9.

organization. Dr. Peter Senge defines learning within organizations as "the continuous testing of experience, and the transformation of that experience into knowledge-accessible to the whole organization, and relevant to its core purpose." Learning organizations see the world and the surrounding environment differently. Learning organizations see the big picture rather than the minute details; they have a clear vision complete with the requisite capabilities to realize the vision, and they make necessary change that results in improvements. Most importantly, learning organizations think differently.

Integration, the Internet, free-market capitalism, with its own unique culture, and its own defining technologies, characterizes globalization.<sup>5</sup> With the integration of culture, corporations and nations, the world now conforms to a more homogenous face that will be harder to describe and even harder to understand. Action and reactions now affect all countries, all cultures, all economic societies and all armies on some level. These interactions amongst all global players describe a large global system brought together by information technology. The speed and proliferation of information throughout the world is increasing at a dramatic rate made possible by communication advances and the World Wide Web. Liberal free market economies have expanded from a Cold War level of 8% to a 1997 level of 28% while over \$644 billion of foreign investment is passing hands at an alarming rate.<sup>6</sup> The position the United States finds itself can now be characterized as being part of a world or global system, whether we like it or not. Consequently, rather than being a "super power" in a segmented Cold War system, the United States finds itself as just another actor inextricably linked to a complex global system with a lot more to gain and a lot more to lose.

If the Cold War is over, what happens next? The future operating environment will take on the complex nature of networked systems of various global actors capable of asymmetric acts.<sup>7</sup>

<sup>&</sup>lt;sup>4</sup> Senge, Peter M., *The Fifth Discipline Fieldbook*, (New York: Doubleday, 1994), p. 49.

Friedman, p. 8-9.
 Friedman. The Lexus and the Olive Tree, p. 9.

<sup>&</sup>lt;sup>7</sup> Arquilla, John and David Ronfeldt, *Networks and Netwars*, (Santa Monica: RAND, 2001), p. ix-xii. This

These new global players take advantage of technology to achieve effects disproportionate to the effort involved. Already speed, technology, money, and the Internet are proliferating around the world. No longer is the enemy easy to identify or categorize. In light of the recent attack on September 11, 2001, anti-terrorism has stepped back into our National Security agenda and with it brings a whole host of unanswered questions. If the first Cold War represents the fight to maintain democracy, we are certainly in a fight to maintain globalization. Walter A. McDougall asserts that the United States will find itself fighting a Cold War II, one that "opposes suicidal enemies of globalization." He goes on by describing that "we cannot begin to predict the course of this conflict precisely because the enemy is so diffuse, the allies so varied and numerous, and the weapons at hand so unsure." Interestingly enough, globalization affects all of the global players and the existence of "good guys" and "bad guys" is quickly becoming a thing of the past. Simply put, it appears that the future operational environment will be a complex system where the enemy is hard to define, locate and defeat. It is important to recognize the difficult task of truly depicting all of the factors that describe how the enemy looks, or how he fights and for what reason. What is complexity and what impact does it have on the Objective Force?

Complexity is the broad range of combinations between complete order and utter chaos. Complexity theory attempts to describe the nature of "the way things are" in a transitional zone where events, societies or even economies cross back and forth between chaos and order. Thus, complexity is "a class of behaviors in which the components of a system never quite lock into place, yet never quite dissolve into turbulence, either." These complex systems behave in a dynamic manner and are able to act, react, and adapt to survive in any environment. This exact

recent book from RAND studies the recent success of the "networked" organization and its overwhelming effectiveness in the wake of the information age. Many of these organizations are leaderless, come "together in swarming attacks", and then disband just as quickly.

<sup>&</sup>lt;sup>8</sup> McDougall, Walter A. "Cold War II," Orbis 9, no. 8 (Winter 2001), p. 8. This article is an interesting read that makes the argument that the United States will find itself entrenched in a second Cold War. Finally, he is able to describe briefly some of the dominating characteristics of what the second Cold War would look like and how the United States might fight it.

<sup>&</sup>lt;sup>9</sup> McDougall, p. 10.

<sup>&</sup>lt;sup>10</sup> Waldrop, M. Michael, *Complexity*, (New York: Touchstone, 1992), p. 293.

dynamic behavior baffles many organizations. The United States Army, like most hierarchical organizations, has a hard time analyzing these complex systems because it wants to see, categorize and understand all of the individual parts that make up the system. This linear analysis technique, although effective in certain contemporary scenarios, will be ineffective in a global complex world. Systems thinking and systems understanding enable organizations to "take a step back" and see the entire system, regardless of its complex nature.

Fighting complex organizations do not require complex solutions. In fact, it requires simple solutions. These solutions result from systems thinking that enable the learning organization to see "through" the detailed complexity. Systems thinking is seeing the interrelationships rather than linear cause-effect chains and seeing processes of change rather than snapshots. Systems thinking gets at the root cause of a problem and looks past the superficial or symptomatic characteristics that tend to confuse the analytical process. Systems thinking that will enable the Objective Force to thrive in the future.

The Objective Force is going to fill an operational void that exists in our Army today. Currently, our Army does not possess a force that is able to deploy rapidly to any location worldwide with sufficient firepower, survivability and logistics. The Objective Force has seven capabilities that drive the operational and organizational development. No doubt the Army will invest millions of dollars and thousands of man-hours determining how the Objective Force should be developed with regard to the Army DTLOMS model (Doctrine, Training, Leadership, Operations, Materiel and Soldiers). Already, it is easy to see that the environment will almost certainly change faster than the procurement and doctrinal development capabilities of the Army. Thus, this impact produces a dilemma, as technological advances will not keep up entirely within the complex operational environment. There needs to be an additional set of skills that will

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<sup>&</sup>lt;sup>11</sup> Senge, *The Fifth Discipline*, p. 73.

Department of the Army, *United States Army White Paper: Concepts for the Objective Force*, (Washington D.C.: Government Printing Office, 2001), p. iv. In the opening paragraph of the Objective Force White Paper, the qualities of *responsive*, *deployable*, *agile*, *versatile*, *lethal*, *survivable* and *sustainable* will enable the

enable the Objective Force to not just keep up with, but dominate in any environment, complex or not.

This monograph will focus on current Army doctrine and its ability to enable the Objective Force to operate in a fluid and changing environment. For that reason, the Army and it's Objective Force must be able to operate in a complex environment, with the capability to analyze, adopt and integrate systemic changes faster than the enemy if it is expected to dominate. Systems thinking at the organizational level will enable the Army and its Objective Force to be a premier fighting force capable of excelling in any complex environment. Organizational learning theory brings together these concepts of systems thinking and adaptation.

To be sure, learning organization theory is not a fad. In addition to numerous major corporations adopting learning cultures, there is a large growing society connecting through periodicals, websites and books advancing the concepts of learning in organizations. <sup>13</sup> This is true for one primary reason; people make the corporation what it is today. Companies and corporations are communities that operate within a learning culture. Additionally, there are professional organizations, journals and conferences that foster the theory of learning in organizations for the benefit of all organizations.

This monograph first examines the work of Dr. Peter Senge, and his work, *The Fifth* Discipline, other scholars' work regarding learning organizations and emerging disciplines for the Objective Force. In doing so, a model reflecting Dr. Senge's five disciplines and Objective Force concepts will describe what the Objective Force would look like as a learning organization. This model will become the base line for comparison for current Army doctrine and its ability to enable the Objective Force to become a Learning Organization. Chapter two analyzes whether current Army doctrine is in-line or not with the new base line model. Dr. Senge introduces five

Objective Force to see first, understand first, act first and finish decisively across the entire spectrum of conflict. <sup>13</sup> Senge, Peter M., The Society for Organizational Learning (SOL) is a website dedicated to "discover, integrate and implement theories and practices for the interdependent development of people, their networks, and their institutions through integrating research, capacity building and practice." Currently there are thirty-nine

disciplines that learning organizations must master to become effective in a dynamic complex environment. These five disciplines, therefore, form the base line principle criteria used to answer the research question. The criteria are:

- 1) Does the Army exhibit Personal Mastery?
- 2) Does the Army understand Mental Models and their interaction on how decisions are made?
- 3) Does the Army possess a shared vision?
- 4) Does the Army exercise Team Learning?
- 5) Does the Army understand and is it willing to implement Systems Thinking?

There is one major limitation in comparing the baseline model against current Army doctrine. There is no objective data directly assessing learning organization theory within the Army. Consequently, an assumption emerges in chapter three that facilitates analysis of current Army doctrine. The assumption is that unit and soldier performance, both in garrison and in the field, reflects Army doctrine. Thus, the National Training Center Trends Compendium (2001) and The Army Training and Leader Development Panel Officer Study Report to the Army (ATLDP) are the primary sources for comparison in chapter three. Finally, the last chapter provides conclusions and makes recommendations.

The Army is certainly at a crossroads where its future path appears difficult to define and understand. Historically, armies that exhibit innovative thought survive and grow. What could be more innovative than adopting a new way of thinking and learning than through becoming a Learning Organization? Systems thinking and systems understanding will enable the Objective Force to see and think differently. Thus, the time is now to examine current United States Army doctrine with a critical eye and to determine whether the Objective Force can in fact, achieve and maintain the dominance across all spectrums of conflict.

countries worldwide with SOL sub-organizations.

### WHAT WOULD A MODEL LEARNING ORGANIZATION LOOK LIKE FOR THE OBJECTIVE FORCE?

As we, the leaders, deal with tomorrow, our task is not to make perfect plans....Our task is to create organizations that are sufficiently flexible and versatile that they can take our imperfect plans and make them work in execution. That is the essential character of the learning organization. <sup>14</sup>

--Sullivan and Harper

I am tempted to say that whatever doctrine the armed forces are working on now, they have got it wrong. I am also tempted to declare that it does not matter....What does matter is their ability to get it right quickly, when the moment arrives....When everybody starts wrong, the advantage goes to the side which can most quickly adjust itself to the new and unfamiliar environment and learn from its mistakes.<sup>15</sup>

--Sir Michael Howard

In "getting it right" quickly, units succeed in an increasingly complex operational environment. In doing so, they gain and maintain the initiative. The nature of such an environment requires adaptive forces. The need for human beings to get the exact answer in problem solving is one of the major causes for spending a lot of time and energy within organizations in striving for perfection. This "paralysis through analysis" resulting in inaction is exactly what Sir Michael Howard is professing that organizations must stop. The Army must recognize the accrued benefits when organizations get it "about right", and then as the situation and conditions change over time, adapt and implement the final details when solving a problem. When analyzing and solving problems in a static environment, however complex, the process described is acceptable. But, when faced with a thinking opponent who is able to react and change within any operational environment, the ability for an organization to adapt *quicker than the opposition* is critical for decisive victory.

210. <sup>15</sup> Howard, Michael, *Military Science in the Age of Peace*, RUSI, (Journal of the Royal United Services Institute for Defence Studies, 1974), p. 6.

<sup>&</sup>lt;sup>14</sup> Sullivan, Gordon R and Michael V. Harper, *Hope Is Not A Method*, (New York: Times Business, 1996), p. 210.

The logic flow in developing the model learning organization for the Objective Force is in the following figure.

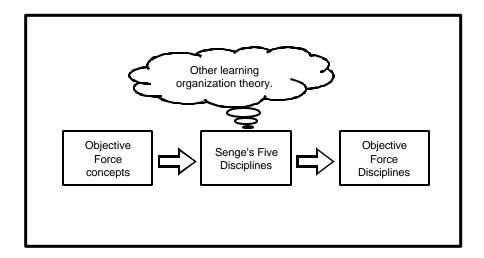


Figure 1. Logic in building the Objective Force Disciplines, a hypothetical model for the Objective Force.

What should the model organization look like in relation to the Army's Objective Force?

One way is through becoming a learning organization. Dr. Peter Senge describes the continual excellence that organizations can achieve by adopting his five learning disciplines found in his 1990 work, *The Fifth Discipline*. Dr. Senge is certainly not the first to describe or research the importance of learning organizations, but his work has received popular recognition across various fields since its introduction. Consequently, Senge and his co-authors have introduced a work that describes "how to" become a learning organization, *The Fifth Discipline Fieldbook*.

What is a learning organization? Senge defines a learning organization as "an organization that is continually expanding its capacity to create its future." Senge continues by drawing the conclusion that the ability to "expand its capacity to create its future" is a function of both

<sup>&</sup>lt;sup>16</sup> Senge, *The Fifth Discipline*, (New York: Doubleday, 1990), p. 14.

"adaptive learning" and "generative learning". <sup>17</sup> In an article describing strategies for creating learning organizations, William R. King combines Dr. Senge's definition with D.A. Garvin's thoughts to come up with a comprehensive definition that fits the needs of the Objective Force. Thus, a learning organization develops as one that creates, acquires and communicates information and knowledge, behaves differently because of this, and produces improved organizational results from doing so. 18

It is important to recognize that a learning organization is able to create the conditions and atmosphere necessary for change in today's complex environment and then be able to implement that change efficiently. The Army's future Objective Force will have similar challenges as well. One of the Objective Force's *emerging* purposes is to "ensure its long-term relevance to adaptive, sophisticated threats and the frequently changing requirements of the emerging operating environment." How will the Objective Force accomplish this? The Army can accomplish this purpose by changing the way it thinks. In becoming a learning organization, the Objective Force maintains its operational advantage in the future operating environment, whatever it may be.

The baseline model of a learning organization incorporates Senge's Five Disciplines, Objective Force requirements and other pertinent learning organization theory. Two learning concepts appear worth exploring before covering the five disciplines. First, learning is "the ability to gain knowledge or understanding of or skill in by study, instruction, or experience."<sup>20</sup> The second and pertinent concept in building a learning organization is that of metanoia, a shift of mind. 21 Senge put it best: "To grasp the meaning of metanoia is to grasp the deeper meaning of learning, for learning also involves a fundamental shift or movements of mind."<sup>22</sup> What then,

<sup>&</sup>lt;sup>17</sup> Senge, *The Fifth Discipline*, p. 14. Senge points out that "adaptive learning" is not enough to become a learning organization, but it must also possess "generative learning", learning that enhances our capacity to create. Senge defines "adaptive learning" as survival learning.

18 King, William R., "Strategies for Creating a Learning Organization," (Information Systems Management,

<sup>2001),</sup> p. 12.

19 Department of the Army, Unit of Employment Concept, (UE concept, p. 5.

<sup>&</sup>lt;sup>20</sup> Webster's Collegiate dictionary, p. 663.

<sup>&</sup>lt;sup>21</sup> Senge, p. 13.

<sup>&</sup>lt;sup>22</sup> Senge, p. 13.

constitutes a "shift of mind" for an organization? This "shift of mind" relates to Army culture. Soldiers and their everyday experiences, practices and beliefs shape the Army culture. Doctrine has a direct influence on the Army culture; in fact, everything the United States Army does contribute to Army culture. The role of our doctrine in this process is critical, it lends legitimacy to the concepts and aligns the underlying beliefs of how the Army operates. To "shift" the collective Army mind, will require a "shift" in Army culture.

Dr. Peter Senge's five disciplines will form the nucleus of this model. In *The Fifth Discipline*, the disciplines are the "lifelong programs of study and practice" that enable an organization to realize its goal of becoming a learning organization. <sup>23</sup> Senge's five disciplines are:

- 1) **Personal Mastery**-learning to expand our personal capacity to create the results we most desire, and creating an organizational environment which encourages all its members to develop themselves toward the goals and purposes they chose.
- 2) **Mental Models**-reflecting upon, continually clarifying and improving our internal pictures of the world, and seeing how they shape our actions and decisions.
- 3) **Shared Vision**-building a sense of commitment in a group, by developing shared images of the future we seek to create, and the principles and guiding practices by which we hope to get there.
- 4) **Team Learning**-transforming conversational and collective thinking skills, so that groups of people can reliably develop intelligence and ability greater than the sum of individual member's talents.
- 5) **Systems Thinking** -a way of thinking about, and a language for describing and understanding, the forces and interrelationships that shape the behavior of systems. This discipline helps us see how to change systems more effectively, and to act more in tune with the larger process of the natural and economic world.<sup>24</sup>

Senge stresses that these five disciplines must work together as a system and that they are not stand-alone concepts. It is the Fifth Discipline, Systems Thinking, that embodies the entire theory behind a learning organization thereby enabling an organization the ability "to contemplate the whole, not individual parts" in producing changes more effectively. Learning organizations are able to master systems thinking in a global world. This concept requires a new way of

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<sup>&</sup>lt;sup>23</sup> Senge, *The Fifth Discipline Fieldbook*, p. 6.

Senge, The Fifth Discipline Fieldbook, p. 6.

<sup>&</sup>lt;sup>25</sup> Senge, *The Fifth Discipline*, p. 7.

thinking. To do this requires time, patience, a change in bias, and most importantly, a willingness to see the world as a system.

Systems remain complex, as always. Humans tend to "boil down" the system to its essential parts so it, the system, can then be easier to understand. This process is known as reductionism. However, by reducing a system down to its supposed key elements, the finer (often harder to understand) interactions that actually make up the larger system are invariably overlooked. Consequently, the true understanding of a system is often misunderstood and with this misunderstanding, comes inappropriate solutions to superficial symptoms that completely miss the underlying problem. Applying superficial solutions to problems in a globalized world will not work.

The Army is also a system, made up of many units, equipment, organizations and personnel. Unlike corporate America, for which the Fifth Discipline was originally written, the Army has a unique mission all its own, "to fight and win the nation's wars". <sup>26</sup> The Objective Force will be one of those very units that will have the responsibility of contributing to the success of the Army. The Objective Force must be able to "see first, understand first, act first and finish decisively in every condition and every environment."<sup>27</sup> To be dominant, the Objective Force must achieve "adaptive force dominance" – the ability to change patterns of operation without major reorganization faster than the enemy can respond and to adjust to enemy changes of pattern than he can exploit them. <sup>28</sup> In all, the Objective Force can literally become the most uniquely capable force that is able to dominate across the entire spectrum of conflict. In addition, if the Objective Force and the Army are successful in adopting the learning organization "culture and shift in mind", the resulting adaptive and generative learning capabilities will enable our forces to

<sup>&</sup>lt;sup>26</sup> Department of the Army, *Field Manual 3-0, Operations*, (Washington D.C.: Government Printing Office,

<sup>2001),</sup> p. 1-2.

27 Department of the Army, *United States Army White Paper: Concepts for the Objective Force*, (Washington D.C.: Government Printing Office, 2001), p. 7.

28 United States Army White Paper: Concepts for the Objective Force, p. 8

adapt and grow in any environment. Technical solutions, although necessary, can only last as long as it's underlying technology.

In developing the baseline model of a learning organization for the Objective Force, Dr. Senge's five disciplines merge with the new emerging requirements of the Objective Force along with any relevant theory by other experts in the field of learning organizations. A final "discipline" acts as an Objective Force baseline for further analysis in chapter three.

#### "Soldier Mastery"

Thirst for excellence comes from within every individual in an organization. Senge's first discipline, Personal Mastery, describes the necessity for every individual within an organization to want to strive for excellence. The individual strives for excellence because he wants to, it is a calling. This kind of attitude is born from a learning atmosphere, a learning culture. As Senge put it, "learning to expand our personal capacity to create the results we most desire." This first discipline is one of three critical core disciplines that will define the learning organization model for the Objective Force.

Peter Drucker, renowned organization theorist, recognizes a similar trait is necessary for organizations to succeed in the future. In his recent work, *Management Challenges for the 21<sup>st</sup> Century*, Drucker describes the concept of "Managing Oneself" as it relates to "knowledge workers" and the new demands of the individual within an organization. <sup>30</sup> Drucker goes on by identifying four demands on the individual, and how these demands interact with other workers within the organization. First, knowledge workers must concentrate on their strengths and constantly improve upon them. This constant improvement results in minimizing "intellectual arrogance"; the mental poison that stifles learning. Next, knowledge workers *know* where and when their efforts are required within an organization. This knowledge is a result of experience,

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<sup>&</sup>lt;sup>29</sup> Senge, *The Fifth Discipline*, p. 141.

<sup>&</sup>lt;sup>30</sup> Drucker, Peter F., *Management Challenges for the 21<sup>st</sup> Century*, (New York: Harper Business, 1999), p. 163.

training and vision. The old adage of "Just tell me what to do, but do not tell me how to do it" is no longer valid. Rather, the knowledge worker will know what to do, when to do it and for what purpose. Finally, knowledge workers see themselves as part of an organization; as a group of knowledge workers. Accordingly, the knowledge worker takes on the responsibility of working together with other individuals in the organization through communication and understanding to achieve the end-state.<sup>31</sup> In all, Drucker describes the new responsibilities of the individual within an organization as they relate to growing excellence. How important is knowledge within the learning organization?

Where does *knowledge* reside within an organization? Linda Argote's quantitative work Organizational Learning: Creating, Retaining and Transferring Knowledge explores the interaction of knowledge within organizations and how that knowledge is used. Knowledge means what is or can be known by an individual or by mankind acquired by study, investigation, observation, or experience.<sup>32</sup> Argote shows that knowledge embeds in four distinct locations; in the Organization, in Technology, in the Structure and Routines and in the *Individual*.<sup>33</sup> The individual can transfer knowledge tacitly or explicitly. Accordingly, knowledge is the lifeblood of the Objective Force, it defines the quality of "firsts', it manifests itself in achieving dominant situational understanding, it makes "adaptive force dominance" work; simply put, knowledge defines the very being of the Objective Force Soldier.

The Army White Paper on the Objective Force recognizes that soldiers and leaders will be the "enduring hallmark" of the Objective Force.<sup>34</sup> These soldiers must desire to be in the Army and be part of the team. They must be technologically perceptive and possess initiative as well as discipline. Soldiers must understand that learning is a continual process that lasts their entire

Drucker, p. 163-187.
 Webster's Collegiate Dictionary, p. 665.

<sup>&</sup>lt;sup>33</sup> Argote, Linda, Organizational Learning: Creating, Retaining and Transferring Knowledge, (Boston: Kluwer Academic Publishers, 1999), p.74-82.

34 United States Army White Paper, Concepts for the Objective Force, p. v.

career and their entire life. Thus, soldiers will be the centerpiece for the Objective Force. In all, the first discipline is a military adaptation of Senge's "personal mastery", of Drucker's "managing oneself" and of the Objective Force made up of soldiers.

Therefore, Soldier Mastery is soldiers and leaders striving to learn and master the skills, knowledge and technology necessary, as they relate to Unit Vision, for continual development in both themselves and the unit.

#### "Relational Dominance"

Actions resulting from decision are a function of the way individuals and organizations see the world. Senge's concept of mental models and how they allow a person or organization to "reflect and continually clarify" pictures of the world directly relate on how individuals and organizations see themselves with respect to their environment. It is the classic, "How do I see myself in relation to others in a certain environment?" These relational concepts influence decision-making. Decisions are what make an army function. Mastering these decisions as they lead to decisive action is what makes an army dominant. Relational Dominance is the second of three core disciplines in the model organization.

Units seeking and achieving decisive action accomplish the mission. FM 3-0, *Operations*, describes decisive operations as conclusively determining the outcome of a major operation. <sup>35</sup> Recognizing and exploiting weakness can lead to decisive action in a conflict. In a fascinating article found in *Comparative Strategy*, R. Evan Ellis explores the importance of a learning organization's understanding of "windows of opportunity". Ellis defines a "window of opportunity" as an "opportunity that can be exploited if the side to which the advantage accrues recognizes the opportunity and acts to exploit it before the vulnerable side recognizes the nature of the danger and acts to create effective hedge or accommodation." <sup>36</sup> In a simple and

<sup>&</sup>lt;sup>35</sup> *FM 3-0 Operations*, p. 4-23.

<sup>&</sup>lt;sup>36</sup> Ellis, R. Evan, "Organizational Learning Dominance: The Emerging Key to Success in the New Era of Warfare." *Comparative Strategy* 18, no. 2 (April/June 1999): p. 192.

unchanging world, where the nature of warfare was relatively static, there are few opportunities worth exploiting. Ellis points out that "in periods of transition, the nature of combat will make the recognition, <u>understanding</u>, and acting on sources of advantage <u>pivotal</u> to the outcome of the <u>conflict</u> [emphasis added] at all levels of warfare."<sup>37</sup> Windows are just that, they open and shut, they are fleeting and are available for short periods. To operate within a narrow "window" of time, an organizations' "mental model" must allow it to see clearly all things at all times for fast efficient decision making. In simpler terms, "I not only see you, but I see your temporary and decisive flaw that will lead to your defeat <u>and</u> I can act on it quicker than you can prevent me from acting on it." This is the ultimate in getting inside the opponents decision cycle.

The Objective Force is a force of the future. It operates off seven capabilities enabling it to "see first, understand first, act first, and finish decisively in every condition and environment." These dominant qualities, these qualities of "firsts", describe what the Objective Force needs to do *and what not to do* in order to dominate. Achieving this level of decisive action requires new decision making and new ways of using data, information and knowledge. The combination of all three, coupled with experience, leads to understanding.

Thus, Relational Dominance is possessing the ability to identify and realize (implies understanding and deciding) the benefits of "windows of opportunity" that are <u>decisive</u> quicker than the opposition.<sup>39</sup>

#### "Unit Vision"

Dr. Senge describes that a "shared vision" serves as a beacon of commitment and motivation for a group. It is through his third discipline, that organizations are able to "develop the shared

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<sup>&</sup>lt;sup>37</sup> Ellis, p. 192.

<sup>&</sup>lt;sup>38</sup> United States Army White Paper, Concepts for the Objective Force, p. 6-8.

<sup>&</sup>lt;sup>39</sup> It is on purpose that this new Objective Force discipline looks like Adaptive Dominance as outlined in the Objective Force Concept Statement. Senge's concept of "mental models" directly relates to decision-making as it relates to clearly seeing the world and the factors that shape those decisions. Getting inside your opponents decision cycle or "OODA" loop (Observe, Orient, Decide, and Assess) is a classic technique in paralyzing your opponent by presenting multiple dilemmas. The Objective Force's ability to develop the discipline to recognize weakness in relation to its opponent and then act on it quicker is paramount to success in a rapidly changing

images of the future" and from these images, the organization can strive toward a common goal. 40 Shared vision statements come from the team as a whole of an organization, not from management alone. The shared vision belongs to the organization made up of its individuals and their individual aspirations as it answers the question: "What goals is the organization going to accomplish?" An organization that has a truly shared vision, one that the entire organization is committed to, will achieve the "generative learning" that is critical to a learning organization. 41 The generative learning process generates new and aggressive ideas that lead to continued growth for the organization. Generative learning requires a different atmosphere and culture. Unit Vision is the third core discipline, and completes the three building blocks of the Objective Force Disciplines.

The challenge in developing vision statements within the United States Army is one of usefulness. Generally, soldiers view the vision statement as something the commander put together before he came to the unit during his pre-command course. However, make no mistake, these vision statements are very good and embody years of experience and insight on what principles will make a unit great. Does one vision statement fit all units? No. Moreover, will the soldiers believe in the vision as they walk past it on the unit bulletin board once a day? The usefulness comes to play when the soldier believes the vision and uses it, along with unit cohesion and camaraderie, to fuel his desire for continued growth. The truly useful vision is one that reflects the unit's goals and desires. Experienced leadership enables units to realize their vision.

The role of the leader is unique. The leader must find a way of leading the unit in discovering the tenets or baseline principles that define "what right looks like" and relate it to unit goals. The leader is the steward of the vision as he communicates and updates it on a continual

environment.

40 Senge, *The Fifth Discipline*, p. 206.

41 Ibid, p. 206.

basis. To become operationally adaptive in all spectrums of conflict, the Objective Force can no longer afford to operate from individually derived vision statements. To become adaptive, the Objective Force must find what "right looks like". This third core discipline describes how vision builds and fosters a sense of commitment for a learning organization. This vision will provide the "fuel" that burns inside every soldier as every member of the unit strives for excellence.

Visions belong to the unit as they embody the experiences of its soldiers and the commander. Much like standard operating *procedures* dictate how a unit conducts business on a daily basis, the Unit Vision embodies the underlying operating *principles* that define excellence for a specific unit. To develop these underlying principles of excellence, units must train together for extended periods. Units must make mistakes and they should learn from these mistakes for without mistakes there could be no learning. The underlying principles of operational excellence exist in the hard-earned experiences of the unit and its soldiers. All of these requirements describe the time-tested concept of experience. The more experience a unit has the better it is. Building a Unit Vision takes time, experience, and leadership.

The Objective Force White Paper recognizes the human dimension and its importance in achieving a vision. Objective Force Soldiers and Units will "need demanding, realistic training conducted by leaders who feel a moral obligation to train them correctly and make them tough, disciplined and motivated." It is through tough training where experience is gained and vision is built. Finally, it takes experienced leadership to help the unit realize what the guiding principles look like that generates the internal desire for mission success.

Therefore, Unit Vision is understanding the lessons of past experiences (from all individuals and exercises) and then building a sense of "what right is" for the unit and develop guiding principles that will enable the unit to achieve those goals.<sup>43</sup> Unlike, Senge's shared vision; the

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<sup>42</sup> United States Army White Paper, Concepts for the Objective Force, p. 19.

<sup>&</sup>lt;sup>43</sup> Unit Vision is a concept that describes an "unrealized" vision that is "realized" through its leadership. *It is not a command philosophy*. This vision belongs to the unit not the commander, it is supposed to be something that already exists within a unit by the mere fact that soldiers and its experience(s) (good, bad or indifferent) embody

unit vision is a direct result of past experiences, training and unit cohesion (both personal and collective) from everyone within the unit.

#### "Dominant Operations"

It takes leadership to put together all three of the core disciplines and produce synergistic effects. Senge tackles the dynamic of groupthink in his fourth discipline, "Team Learning" as it applies to collective thinking and synergy. This synergy produces solutions that are greater than the sum of their parts, in this case, the sum of the individual effort within the group. Senge's analogy of the "coherent light of a laser rather than the incoherent and scattered light of a light bulb" describes the synergetic process.<sup>44</sup> It is a collective process made up of individual "personal or soldier mastery" combined in a synergistic effect producing a highly unique and effective output. A well-trained football team embodies the concept of team learning. Through hours and days of practice and collective thinking (training) the team reaches a plateau of performance that can be described as "being in the groove", where they know they can't lose and the team is clicking. That "clicking" feeling is no accident. It is a synergistic effect of every player on the field knowing his job and while working towards a team goal, winning. This concept is not new. The open attitudes and "cross talk" go on within the team that truly makes it work. Senge stresses that ideas pass through "dialogue and discussion", the main conduit of "Team Learning". 45 Senge says there are three main components that make up Team Learning. The first is the need to think insightfully about complex issues. The second is the need for innovative, coordinated action. Finally, the last is the role (or effect) of the team members on other teams. 46 Senge hints at the fact that other teams can learn from each other. Although all five of Senge's disciplines work together, personal mastery, shared vision and team learning

the vision. Their past experiences define what "right looks like".

<sup>44</sup> Senge, *The Fifth Discipline*, p. 234. Ibid, p. 237. Senge, *The Fifth Discipline*, p. 236.

connect in a special way. It is through personal mastery that an individual is committed to an organization's goal while working in a team and producing synergistic effects. Dominant Operations is where all of these disciplines come together. This concept has striking similarities to "cognitive tension" as it relates to theory of operational art.

The operational level of war lies between strategy and tactics. FM 3-0 defines operational art as "the use of military forces to achieve strategic goals through the design, organization, integration and conduct of theater strategies, campaigns, major operations and battles."<sup>47</sup> Tension between two competing concepts or beliefs exist at many levels. The cognitive tension found within the operational level of war describes the continual contest between strategic aims and tactical capabilities. Dr. Shimon Naveh, Operational Art theorist, further defines cognitive tension as the "disequilibrium between the general aim (of a system) and the specific missions" within a military construct.<sup>48</sup> In simple terms, resolving tension in any system results in synergy. Naveh recognizes that the end-result in a dynamic complex system, much like the Objective Force, has a unifying and synergistic effect.<sup>49</sup>

One of the two building blocks for the Objective Force is the concept of maneuver Unit of Action (UA). The Unit of Action fights with "teams of teams" concept. The UA employs aggregate mounted and dismounted forces and complementary and reinforcing fires and effects in the appropriate combinations necessary to meet any tactical situation [emphasis added], as well as the widely diverse demands of full spectrum operations.<sup>50</sup> Simply put, the "teams of teams" concept incorporates a modular team (that is trained as a team and committed to the unit's success) into a larger team where roles and capabilities are understood thereby achieving a synergistic effect.

<sup>&</sup>lt;sup>47</sup> Department of the Army, *FM 3-0 Operations*, p. 2-3.

<sup>&</sup>lt;sup>48</sup> Naveh, Shimon, *In Pursuit of Excellence, The Evolution of Operational Theory*, (London, Frank Cass, 1997), p. 7. <sup>49</sup> Ibid, p. 6.

<sup>&</sup>lt;sup>50</sup> "Objective Force Maneuver Unit of Action Concept." Lecture given at Advance Military Studies Program: Command and General Staff College, 2001.

Leadership, as outlined in FM 3-0 and Dominant Operations relates closely through visualizing, describing and directing. The leader plays the primary role in Dominant Operations in achieving synergy. 51 This discipline comprises both art and science as the leader and his unit executes its mission. What is different, is the emphasis placed on leaders in being able to lead using more of their implicit knowledge, experience and training (all of which develop the underlying skill of "art") thereby achieving a more adaptive and synergetic capability.

Thus, Dominant Operations is primarily a leadership discipline that resolves the tension between Unit Vision, Soldier Mastery and Relational Dominance during mission execution as it achieves a synergistic effect in all operational environments.

#### "Systems Understanding"

"Give me a lever long enough...and single handed I can move the world."

Archimedes

Systems Thinking is the cornerstone to the learning organization. L von Bertalanffy, author of General Systems Theory, describes a system as a "complex of interacting elements." This "complex" or grouping of elements exists when a system has a general purpose or aim. Over time, systems thinking will allow the learning organization to see dynamic complexity in a different light. According to Senge, a system is a perceived whole whose elements "hang together" because they continually affect each other over time and operate toward a common purpose.<sup>53</sup> Once again, perceptions play an important role in examining a system, for it is the perception that defines the way a system "hangs together". Senge adds, "without it, there is no incentive nor the means to integrate the (other) learning disciplines once they have come into

<sup>&</sup>lt;sup>51</sup> Department of the Army, FM 3-0 Operations, (Washington D.C.: Government Printing Office, 2001), p. 5-4. Leadership as outlined in FM 3-0 is made up of Visualizing, Describing and Directing. Visualization of the nature and design of an operation is mostly and art. Describing through guidance and intent, which operations

are decisive, shaping and sustaining is both an art and science. Finally, directing the Battlefield Operating Systems through plans and orders is mostly a science. The combination of all three produces the resulting effect(s) that lead to mission success in any conflict.

52 Bertalanffy, L.von, *General System Theory*, (New York: George Braziller, 1968), p. 3.

<sup>&</sup>lt;sup>53</sup> Senge, *The Fifth Discipline Fieldbook*, p. 90.

practice."<sup>54</sup> Senge believes that Systems Thinking is more than just a tool for problem solving but it is also a language.<sup>55</sup> It is a way of describing interactions within a system. These interactions help to describe the behavior of a system and eventually will become second nature.

The benefit from Systems Thinking is being able to look at any system and see its interactions and see how it behaves, ultimately leading to a broad understanding that is critical in making changes to systems. Senge's work on systems thinking is not unique. What is unique is his recognition that systems thinking cannot stand alone, but rather it needs the other four disciplines for a learning organization to realize its true adaptive and generative learning potential.

As it relates to the previous four disciplines, Systems Understanding enables a soldier (Soldier Mastery) to see and understand how his actions interact in the larger role and mission of the unit. Systems Understanding enables units to recognize, analyze and solve problems in any context quicker and more efficiently (Relational Dominance) than traditional linear cause and effect thinking models. Systems Understanding will demonstrate to the unit and its soldiers the relationship and importance a vision has (Unit Vision) as it relates to continued growth. Finally, Systems Understanding shows the leader the tension that exists between the general aim and capability of an organization, and the possible ways in resolving (Dominant Operations) that tension in a manner that results in synergistic action.

The Objective Force White Paper states that the Objective Force needs to become an "enhanced learning organization". <sup>56</sup> The "enhancement" is the shift in cultural attitudes within the United States Army. As such, Systems Understanding is the critical foundation for the

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<sup>&</sup>lt;sup>54</sup> Senge, *The Fifth Discipline*, p. 69.

<sup>&</sup>lt;sup>55</sup> Senge, *The Fifth Discipline Fieldbook*, p. 88. Senge uses three terms that make up his system thinking language: causal loop diagrams, archetypes, and computer models. Loosely defined, a causal loop diagram is a result of braking linear case and effect thinking by describing "systems" as a circular system influences that provide "feedback". An archetype recognizes that certain patterns of structure recur again and again and that these archetypes embody the key to learning to see structures in our personal and organizational lives. The two most common archetypes are "Limits to Growth" and "Shifting the Burden".

<sup>&</sup>lt;sup>56</sup> Department of the Army, *United States Army White Paper, Concepts for the Objective Force*, p. 11.

Objective Force Disciplines as they apply to learning within an organization.

Therefore, Systems Understanding is a way of seeing, comprehending and understanding the way a system behaves. It completes and solidifies the concept of learning within a unit and makes decision-making easier as it relates to solving problems in a complex operational environment made up of many dynamic adversaries.

The roles of leadership in helping the learning organization realize its vision is paramount.

Leaders must understand, practice and encourage the use and embodiment of the learning disciplines. Similarly, throughout the history of the United States Army, leadership in battle and in peace has been the touchstone for Army excellence. Leadership will continue to be at the forefront in enabling the Objective Force in becoming a reality.

These new "Objective Force Disciplines" will serve as a set of principles that define the way the Objective Force can achieve operational dominance in the future operating environment.

These new disciplines represent a new way of thinking; a prerequisite if the Objective Force is ever to achieve the goals set forth in the Army Vision Statement. The end-result is an adaptive force able to adjust its old way of thinking into a new way of thinking and understanding without compromising tradition and esprit de corps.

Table 1

Objective Force Disciplines		
Soldier Mastery "Core Discipline"	Soldier Mastery is soldiers and leaders striving to learn and master the skills, knowledge and technology necessary for continual development in both themselves and the unit.	
Relational Dominance "Core Discipline"	Relational Dominance is possessing the ability to identify and realize (implies understanding and deciding) the benefits of "windows of opportunity" that are decisive quicker than the opposition.	
Unit Vision "Core Discipline"	Unit Vision is understanding the hard lessons of past experiences (from all individuals and exercises) and then building a sense of "what right is" for the unit and develop guiding principles that will enable the unit to achieve those goals. Unlike, Senge's shared vision; the unit vision is a result of past experiences, training and unit cohesion (both personal and collective) from everyone within the unit.	
Dominant Operations "Leadership Discipline"	Dominant Operations is primarily a leadership discipline that resolves the tension between Unit Vision, Soldier Mastery and Relational Dominance during mission execution as it achieves a synergistic effect in all operational environments.	
Systems Understanding "Holistic Discipline"	Systems Understanding is a way of seeing, comprehending and understanding the way a system behaves. It completes and solidifies the concept of learning within a unit and makes decision-making easier as it relates to solving problems in a complex operational environment made up of many dynamic adversaries.	

### HOW DOES THIS MODEL COMPARE WITH CURRENT U.S. ARMY DOCTRINE?

...Objectives are achieved but always at a cost to your soldiers. It is why at all levels the aim always is mission at least cost. Often that least cost is achieved by seizing the initiative and by bold action. Commanders and soldiers have to feel it all to really know what to do. But in feeling it all he must not be paralyzed into inaction. They must decide, often in nanoseconds, make the decision stick, and go on. They must feel but they also must act. They cannot give in to second guessing themselves nor to their emotions. That is what makes combat leadership so demanding.<sup>57</sup>

--General Frederick M. Franks Jr. VII Corps Commander, Operation Desert Storm

General Franks' insightful comments on the challenges of battle command in FM 3-0, *Operations*, represent the importance of decision making in combat under extreme pressure to accomplish the mission at hand. Battle command is tough, there is no doubt, and it will be even tougher in the coming years. The new Objective Force Disciplines will help soldiers and leaders in developing the necessary cultural base that will shape their actions in the future. This chapter will analyze the new baseline model against unit and soldier performance.

The Objective Force Disciplines focus on expanding soldier and leader capacity; understanding and making decisions quicker; recognizing, developing and realizing a unit vision; coordinating a units' efforts and achieving synergistic effects and finally, thinking efficiently through systems understanding to achieve total dominance. These disciplines describe the way the Objective Force will think and analyze problems in order to be the dominant force in any environment.

As mentioned in the opening chapter, the major assumption governing the analysis of Army doctrine, as it relates to the research question, is that *unit and soldier performances* in the field, in garrison, and at the Combat Training Centers, *reflect doctrine and its effectiveness*. Specifically,

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<sup>&</sup>lt;sup>57</sup> Franks, Frederick M., electronic mail to Director, School of Advanced Military Studies, US Army Command and General Staff College, (Fort Leavenworth, Kansas: Combined Arms Research Library Archives, 2000), p. 1.

it reflects how the Army sees things, how it thinks and understands and how it acts (through decisions at all levels) on and off the field of battle. As such, the comparison of whether current doctrine will enable the Objective Force in becoming a learning organization is in the following line diagram.

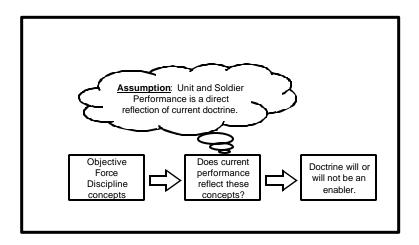


Figure 2. Logic Flow in analyzing doctrine against Objective Force Disciplines.

This chapter will address the question, "Does the Army's performance (hence, our doctrine and its development) fit in the Objective Force Disciplines?" Positive responses signal a trait or characteristic that needs to be maintained, whereas, negative responses signal a possible weakness in our doctrine in which a discipline is lacking. The two primary studies that capture army performance are Combat Training Center Trends Analysis (*National Training Center Trends Compendium*) and the recent *Army Training and Leader Development Panel Officer Study* (ATLDP). Both studies have large sample sizes, are statistically significant, and represent the majority of the population within the Army.<sup>58</sup> In following the logic above, the relevance of

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<sup>&</sup>lt;sup>58</sup> The *NTC Trends Compendium* represents two and half fiscal years of rotations, approximately twenty-five rotations. The Compendium is a continuing document from the NTC and represents recurring trends from years past. The ATLDP survey contacted over 13,500 officers during the yearlong study as they examined the atmosphere of training and leadership within the Army.

current doctrine with respect to the Objective Force becoming a learning organization will come to the surface.

In May 2001, the Center for Army Lessons Learned (CALL) published the *National Training Center (NTC) Trends Compendium*. This work compiles *repeated* trends (both positive and negative) from ten quarters worth of previous NTC trends.<sup>59</sup> These trends are mistakes continually made by Brigade Combat Teams (BCTs) across the Army during their capstone-training event against a living, breathing and thinking enemy. These BCTs are task organized with Infantry, Armor, Artillery, Aviation, Engineer, and Combat Service Support sub-units. The target audience for this compendium is tactical field units, analysts, researchers and doctrine writers. The Trends Compendium intends to be useful in the DTLOMS process as well as identifying successful techniques and procedures for emerging doctrine.<sup>60</sup> The work is relevant and useful as a comparison tool against the Objective Force Disciplines.

Analysis will show that units are becoming disorganized, inefficient and *overwhelmed by data*. These problems are a result of data overtaking the current command and control environment; a rigid inflexible system based on compliance. The NTC Trends Compendium breaks up the Battlefield Operating Systems (BOS: Intelligence, Maneuver, Fire Support, Air Defense, Mobility Survivability, Combat Service Support, Command and Control) with a frequency matrix showing the number of times a trend occurred by semiannual period. The Compendium analyzes the largest and most reoccurring trend for each BOS. Interestingly, the Command and Control BOS has four alarmingly high trends that hit at the heart of the matter;

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<sup>&</sup>lt;sup>59</sup> The NTC Trends Compendium covers 3-4 QTR FY97, 1-2 QTR FY98, 3-4 QTR FY98, 1-2 QTR FY99 and 3-4 QTR FY99.

<sup>&</sup>lt;sup>60</sup> NTC trends Compendium, p. 1.

<sup>&</sup>lt;sup>61</sup> Collins, Rod, "Auditing in the Knowledge Era", *Internal Auditor* (June 1999), p.31. This article shows how the learning organization is overtaking the command and control organization in a new era based on knowledge. It specifically refers to Dr. Peter Senge's work, *The Fifth Discipline*, as the article focuses on commitment as the main imperative that ensures success in today's knowledge based world.

Command and Control organizations are old inflexible systems incapable of operating effectively in an environment that is increasingly complex and governed by the management of knowledge.<sup>62</sup>

In June 2001, a recent ground breaking study, The Army Training and Leader Development Panel Officer Study (ATLDP), explains the imbalance between practices and beliefs within the United States Army while making observations and recommendations that address the problem. The panel broke the observations (which were also its main problem areas) into Army Culture, Officer Education System, Training, Leader Development, Leader Development Management Process and Lifelong Learning.<sup>63</sup> These observations reflect the responses from over 13,500 surveyed officers within the Army and show where the Army needs to focus its efforts. These imperatives will help in developing what the panel calls "enduring competencies" of selfawareness and adaptability in future leaders for the Objective Force. These competencies depend on a values-based, research-based and strategy-based methodology found within a new leader development model. 64 These enduring competencies are nothing new to leadership development. The difficult part lies in building a usable construct or model that develops our leaders and then using it. At times, the Army is guilty of not practicing its own doctrine and definitely, this is one of those times.

#### **Soldier Mastery Analysis**

Soldier Mastery is soldiers and leaders striving to learn and master the skills, knowledge and technology necessary for continual development in both themselves and the unit.

The Objective Force Disciplines embody concepts that can lead the Objective Force to excellence, continued growth and adaptive dominance. At the center, are the three "core" disciplines, Soldier Mastery, Relational Dominance and Unit Vision. These "core" disciplines are

<sup>&</sup>lt;sup>62</sup> NTC Trends Compendium, p. 5. Battle Tracking and Situational Awareness, Military Decision Making Process (MDMP), Course of Action Development/Wargaming and Rehearsals.

<sup>&</sup>lt;sup>63</sup> Department of the Army, The Army Training and Leader Development Panel Officer Study Report to The Army, (Washington D.C.: Government Printing Office, 2001), p. 22. 64 ATLDP, p. 3.

the building blocks that when coupled with the "leadership" discipline, *Dominant Operations*, achieves a synergistic effect in a systems environment. Operating in a systems environment requires *Systems Understanding* to observe, to see, to understand and to act all in a dominant fashion. It is arguable that *Soldier Mastery*, one that describes a soldier's professionalism, is the most important discipline in making a unit great. Technical and tactical proficiency are hallmarks of soldier professionalism in the United States Army and represent a large portion of *Soldier Mastery*, but there is one element central to the definition. At the heart of Soldier Mastery is commitment, commitment to oneself and to the unit. This commitment must be durable, intense and fuel the drive for continual excellence. Both commitment and professionalism need to exist for *Soldier Mastery* to exist.

United States Army doctrine outlines a useful model in character and competence. FM 22-100, *Leadership*, outlines clearly the Be, Know, Do leadership development model where selfless service and striving for personal excellence are the standard. In it, the doctrine outlines the Leader of Character and Competence Acts (through Be, Know, Do construct) to achieve excellence. The model is complete with seven values, three attributes, four skills and three controlling actions all designed in making the Leader a decisive factor in combat. However, there is a problem at the personal growth and feedback level of soldier and leader development. The recent exodus of mid-level officers amplifies this problem after Desert Storm and into the late 1990's.

Across the ranks, through both enlisted and officer, commitment to the Untied States Army appears to be on a downslide. This downslide is a representation of the recent Army Training and Leadership Development Panel published in June 2001. In the study, the blue ribbon panel discovered that a cultural imbalance exists between expectations and practices within the Army. <sup>66</sup>

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<sup>&</sup>lt;sup>65</sup> Department of the Army, *FM 22-100 Army Leadership*, (Washington D.C.: Government Printing Office, 1999), p. 1-3.

<sup>&</sup>lt;sup>66</sup> *ATLDP*, p. 1.

Respondents claim the Army is not practicing what it is preaching and the officers are questioning the practices and expectations of their profession and are having serious doubts about making a career out the Army. This deteriorating commitment is demonstrated through the startling number of Lieutenant Colonels recently turning down battalion command assignments, once considered the common goal for officers at the end of a twenty-year career. Why? There are two possible reasons. First, the Officer Cultural expectations are unhealthy and possibly unrealistic. Second, the Army has forgotten the lesson of operational tempo and how it relates to soldier endurance, not just physical endurance, but also career endurance and family endurance. These two reasons coupled with a flawed or ineffective professional feedback mechanism are not fulfilling the professional growth need of today's military professional.<sup>67</sup> The nature of today's operational environment is one of engagement. On any given day, the United States Army has 141,000 soldiers deployed worldwide. 68 This tempo exists today in an environment where the benefits of serving the Armed Forces dwindle every fiscal year. In either case, the perceived imbalance between "practices and culture" is such that the officer commitment is on a definite downturn.

On the bright side, the professional level of technical and tactical competence within the United States Army is first rate. Soldier technical expertise (officer and enlisted) is visible everyday through the first rate execution of the various complex missions in areas like Bosnia, Kosovo, Macedonia and Afghanistan. The missions are diverse and challenging, requiring a new level of professionalism. Additionally, small unit Troop Leading Procedures were one of the few "Sustain" trends found in the NTC Trends Compendium. <sup>69</sup> Soldier professionalism is more important today than it was just ten years ago. This is true because soldiers' tactical decisions can be broadcast globally, thereby having strategic implications.

<sup>&</sup>lt;sup>67</sup> *ATLDP*, p. 20.

<sup>&</sup>lt;sup>68</sup> Snider, Don M., "The Future of Army Professionalism: A Need for Renewal and Redefinition," *Parameters*, (Autumn 2000), p. 7.

69 NTC Trends Compendium, p. 12.

Therefore, *Soldier Mastery* cannot exist until the overwhelming imbalance between soldier expectations and commitment to the Army changes. That change is doctrinal in nature as it addresses the soldiers' need for professional growth. Until the balance corrects back into the "Band of Excellence", current doctrine will not enable the realization of the first Objective Force Discipline, *Soldier Mastery*.

#### **Relational Dominance Analysis**

Relational Dominance is possessing the ability to identify and realize (implies understanding and deciding) the benefits of "windows of opportunity" that are decisive quicker than the opposition.

Relational Dominance is about perceptions in relation to the tactical situation, understanding it and taking action in that situation. The baseline characteristics that define *Relational Dominance* are best described in the Objective Force "quality of firsts". See First, Understand First and Act First are not buzz words that hype the potential of the Objective Force, rather they represent the dominant decision making nature that must exist to achieve operational dominance. Concepts that define *Relational Dominance* are seeing, understanding and acting.

Intelligence, Surveillance and Reconnaissance (ISR) tasks are directly associated with "seeing" first. The number one occurring trend in the Intel BOS is "Reconnaissance and Surveillance Plan Development and Execution". The primary observations that support this trend is the lack of integration of all of the available collection assets and failure by commanders to give detailed guidance to develop Priority Intelligence Requirements (PIR) as they relate to anticipated decisions. Brigade Combat Teams at the NTC continually struggle with telling units (through an R&S Plan) what to look at, when to look at it and with what asset. In a time-constrained environment dominated by more and more moving pieces and large amounts of data,

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<sup>&</sup>lt;sup>70</sup> NTC Trends Compendium, p. 14. Frequency for this trend is six times in 3-4 QTR FY97, four times in 1-2 QTR FY98, five times in 3-4 QTR FY98, three times in 1-2 QTR FY99 and seven times in 3-4 QTR FY99.
<sup>71</sup> NTC Trends Compendium, p. 14.

the S2 and the supporting staff is now fighting an uphill battle in an attempt to inform the commander. The entire purpose of this process ultimately provides input for commanders to try and understand the situation. As of now, units are not very successful in seeing the battlefield and the enemy "first".

"Understanding first" implies judgment on a set of knowledge (implicit or explicit) before the enemy recognizes a situation for what it is. It is understanding that a "window of opportunity" does exist and it can lead to decisive action. Applying such judgment, regardless of where the knowledge exists, to achieve dominant understanding embodies the second quality of firsts. Achieving a level of understanding that is relevant to the situation takes experience, relevant information and critical analytical thinking within the context of the situation. In current doctrinal terms, understanding is comparable to Battle Tracking, Situational Awareness or Situational Understanding. The quicker commanders can understand a situation, then they can act quicker.

Not managing the relevant data as it relates to understanding is the number one recurring trend within the Command and Control BOS. The Units continually attempt to track all information (resulting from lack of guidance), track the wrong information or fail to identify which information is critical to an upcoming decision. In either case, the process is overwhelmed and the result is an unclear understanding of the situation in the eyes of the commander. The failure rests within the interface between the commander and his staff. Previously in the analog TOC, staffs were used to controlling all information, however "information technology" (really it should be *data transfer technology*, see Appendix A) is crippling the staffs with enormous amounts of data. This overwhelming effect leads to little time, if any, for analysis to reach an understating of a situation. Nonetheless, staffs will continue to have an integral portion in helping a commander understand. The challenge is determining the appropriate mix of staff

<sup>&</sup>lt;sup>72</sup> NTC Trends Compendium, p. 165. Lack of Battle Tracking and Situational Awareness.

efforts. From this analysis, it would seem that more time be spent on analyzing relevant data (information) as it relates to decision making at all levels.

Acting first means making decisions that lead to decisive action before the enemy. Making a battle command decision is tough as mentioned earlier in the introductory quote by General (Retired) Frederick Franks. More so, knowing *when* to make a decision is even more difficult in a complex environment. This too is a recurring trend as "Commanders often do not clearly identify and develop decision points for the operation".<sup>73</sup> If commanders are having a difficult time in identifying which decisions to make, they often are not able to see themselves, the enemy or visualize the decisive, shaping and sustaining operations.

What is important, is that the relation between the staff and commanders as it relates to understanding and decision-making needs to improve. Consequently, current ISR techniques are unable to "see" the complex battlefield in a timely or efficient manner. Second, Battle Tracking techniques and Situational Awareness are easily overwhelmed as they attempt to convey an understanding to the commander. Finally, commanders struggle in identifying which decisions to make as they relate to the decisive operation. As such, current doctrine will not enable the Objective Force in achieving the discipline of Relational Dominance.

#### **Unit Vision Analysis**

Unit Vision is understanding the lessons of past experiences (from all individuals and exercises) and then building a sense of "what right is" for the unit and develop guiding principles that will enable the unit to achieve those goals. Unlike, Senge's shared vision, the unit vision is a result of past experiences, training and unit cohesion (both personal and collective) from everyone within the unit.

*Unit Vision* is the third core discipline designed to provide the commitment and understanding to both the soldiers and the unit as a whole. One of its underlying principles is saving time during actual operations. When taken in context of the other two core disciplines,

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<sup>&</sup>lt;sup>73</sup> NTC Trends Compendium, p. 251.

*Unit Vision* gives the expert soldier a base of implicit knowledge that enables him to act first. Implicit knowledge is a function of operating from a common understanding, a base set of principles thereby influencing many facets of unit performance. The more defined and engrained these principles are within the soldiers of a unit, the more adaptive and aggressive the overall performance of the unit. An analysis of time, operating principles and common understanding will follow. As such, units who train together, for extended periods, develop truly useful visions.

Currently, units are not achieving the level of implicit knowledge indicative of lengthy training time as evidenced by the poor quality and misuse of rehearsals. Units who train together become a team over time. As a result, these teams are able to work effectively in an environment where implicit knowledge and relationships eliminate the need for coordination of basic standard operating procedures (SOPs). This concept is simple in thought, but rather difficult in execution in an atmosphere marked by heavy operational tempo and high personnel turnover. Additionally, achieving a sense of knowing your team and anticipating their actions gets harder the larger the unit gets. During the Military Decision Making Process (MDMP), rehearsals vary in detail and can represent the level of common understanding (implicit knowledge) within the unit itself.<sup>74</sup> The purpose of a rehearsal is to practice portions or actions of a plan not covered by established operating procedures. FM 101-5 states, "rehearsals allow subordinate units and leaders to analyze the tactical plan to ascertain its feasibility, its common sense, and the adequacy of its command and control measures". 75 Rehearsals are a continuing problem at the Combat Training Centers and their lack of detail and synchronization reflect the poor or nonexistent level of implicit knowledge within units. <sup>76</sup> Consequently, poor rehearsals highlight the lack of training units possess (and their underlying implicit knowledge) as well as

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<sup>&</sup>lt;sup>74</sup> Department of the Army, *FM 101-5*, *Staff Organization and Operations*, (Government Printing Office, 1997), p. G-1.

<sup>&</sup>lt;sup>5</sup> Ibid, p. G-1

<sup>&</sup>lt;sup>76</sup> NTC Trends Compendium, p. 202-218.

the lack of understanding between units and within units.

Units are not able to anticipate the types of decisions the commander is going to make (as a result their associated staff decisions and actions), reflecting an unclear understanding of operating procedures and unit vision. Common operating procedures can cover many facets within a unit. One such facet is the concept of Commanders Critical Information Requirements (CCIR) and their relation to commander decisions. FM 3-0, *Operations*, describes that commanders develop information requirements that "they consider most important to their decisions" while confirming "their vision of the battlefield".<sup>77</sup> Commanders and staffs are struggling in identifying, developing and answering the requisite information requirements, known as Priority Information Requirements (PIR) and Friendly Forces Information Requirements (FFIR), to make decisions.<sup>78</sup> The process is linear (and inflexible) in that the staffs must rely on the input from commanders before developing useful PIR in clarifying the picture of the battlefield and supporting the commander subsequent decisions.

Therefore, through a lack of building implicit knowledge bases and linear decision-making models, the current doctrine will not support the development of *Unit Vision* as it relates to the Objective Force Disciplines.

#### **Dominant Operations Analysis**

Dominant Operations is primarily a leadership discipline that resolves the tension between Unit Vision, Soldier Mastery and Relational Dominance during mission execution as it achieves a synergistic effect in all operational environments

In resolving tension, Dominant Operations describes the combination of art and science as leaders combine effects as they achieve their assigned mission. The controlling characteristics that describe achieving synergistic effects are best outlined in the three primary questions that commanders must answer in developing campaigns. 1) What military conditions must be

<sup>78</sup> NTC Trends Compendium, p. 15.

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<sup>&</sup>lt;sup>77</sup> Department of the Army, *FM 3-0, Operations*, (Washington D.C.: Government Printing Office, 2001), p. 6-2.

produced in a theater of war or operations to achieve the strategic goal? 2) What sequence of actions is most likely to produce that condition? 3) How should the resources of the force be applied to accomplish that sequence of actions? Interestingly, these questions, when reworded at the tactical level, reflect the efforts that go on during the brigade and division level targeting process. When synchronized properly, effects can have an overwhelming synergistic effect on the opposing force. Dr. Shimon Naveh states "synchronization is the simultaneous combination of various elements and systemic activities along the entire depth of the operational space with the aim of inflicting disruption on the rival system." As such, the characteristics of the targeting process reflect the dynamic interactions of Dominant Operations. Leadership controls the process at all levels.

Brigades are struggling in the targeting process and fires integration. This is true due to the complex nature of coordinating numerous effects on the battlefield through time and space. Specifically, key personnel disperse on the battlefield leading to confusion and the process not able to produce synergistic effects.<sup>80</sup> Additionally, fires planning (or effects planning) integration with maneuver elements continue to be a problem. 81 Although these are Fire Support observations, they represent the difficulty in sequencing or combining effects (leading to synergy) over time using available resources in achieving a mission. Technology will help connect these key personnel but it will take leadership to lead the synchronization of the effects.

That said, effects planning is on the verge of getting it right with regard to combining effects producing the requisite synergy. However, leadership must understand the challenges of effects planning and be able to plan for them appropriately. Hence, although it comes close, current doctrine needs refinement if it is to achieve optimum synergy.

<sup>&</sup>lt;sup>79</sup> Naveh, Shimon, *In Pursuit of Excellence, The Evolution of Operational Theory*, (London: Frank Cass, 1997), p. 308. 80 NTC Trends Compendium, p. 67.

<sup>&</sup>lt;sup>81</sup> NTC Trends Compendium, p. 78. "The fire support plan and scheme of fires developed by the brigade fire support element (FSE) often do not support the task force's scheme of maneuver or task force commander's guidance.

### **Systems Understanding Analysis**

Systems Understanding is a way of seeing, comprehending and understanding the way a system behaves. It completes and solidifies the concept of learning within an organization and makes decision-making easier as it relates to solving problems in a complex world made up of many systems.

Systems thinkers have the ability to view problems in a holistic manner and then communicate the solution in such a manner that results in a lasting solution. This process mirrors the Military Decision Making Process (MDMP) as much as it does Troop Leading Procedures (TLP). Solving problems every day in any environment requires analytical skills at some level. The skills necessary in using *Systems Understanding* is different from the traditional "cause and effect" analytical tools. It requires an ability to "see" the true underlying source of a problem through the many levels of symptoms and then acting on it. *Systems Understanding* recognizes that patience is key in waiting for a solution to fix the root problem. Therefore, the two major characteristics of *Systems Understanding* is being able to comprehend a system as a whole and then communicate a permanent (decisive) solution.

Solving problems in a combat environment for the Army has mixed reviews. There have been examples of resounding brilliance and utter failure. Recently for brigade sized units, the NTC Trends Compendium shows that poor execution of the MDMP is the second most recurring trend with the controlling observation revolving around lack of details and analysis. Since many staffs and commanders lack the experience and/or understanding about a problem, they make up for the lack of understanding by planning and analyzing for every kind of contingency possible. Details are important when they matter and are associated with the decisive solution. However, in time constrained environments, seasoned commanders know what they want when a situation develops and are able to make decisions and implement plans and orders with speed, efficiency and acceptable results. These skills are attributable to experience and understanding of the tactical situation. Somewhere in between complete detailed analysis of a problem and a

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<sup>82</sup> NTC Trends Compendium, p. 176-181.

recognition prime decision making process is the realm of *Systems Understanding*. The skills, capabilities and experience of leaders suggest that the Army is capable of Systems Understanding but the doctrine needs to reflect more accurately the principles and concepts as such.

The ATLDP recognizes that micromanagement is a serious problem within the senior leadership of the Army. <sup>83</sup> Along with affecting officer retention, leader development and a fear of failure (which impacts on learning), micromanagement denies the leader the ability to "see" a problem and its associated interrelationships found on a larger scale. This is just one facet of the current Army culture, which needs changing. It affects the Army's ability to learn and use *Systems Understanding*. Conversely, leaders who use *Systems Understanding* to achieve a holistic view of a problem are able to instill confidence in their subordinates, develop subordinates that ultimately lead to higher retention.

Thus, a linear "cause and effect" problem solving model and a culture that encourages micromanagement shows that current doctrine will not enable *Systems Understanding* to become a reality.

#### An Emerging Objective Force Discipline: Leadership

Sound leadership in any organization is paramount to success. Without it, organizations are doomed to failure. The Army and the Objective Force also rely on leadership to achieve its goals. Leadership in the Objective Force is all about creating commitment within the unit through inspiration. That commitment is born from an intense desire from within every soldier to achieve and believe in the Unit Vision. Remembering from the previous chapter, *Unit Vision* is a product of the experiences of the unit (and its soldiers) and brings to light by the leadership within the unit. Hence, leadership doctrine that embodies the Objective Force Disciplines will certainly enable the Objective Force in becoming a learning organization. In current leadership doctrine,

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<sup>&</sup>lt;sup>83</sup> *ATLDP*, p. 9.

FM 22-100, leadership is "influencing people by providing purpose, direction, and motivation while operating to accomplish the mission and improving the organization". The definition in FM 22-100 is valid in relation to the Objective Force Disciplines. Dr. Senge asserts that the central function of leaders is to develop and articulate "guiding ideas" of vision, values and purpose. It is these values that define the organization and give it direction and these values almost mirror the definition found in FM 22-100. The importance of leadership within the learning organization is paramount, so much so that Dr. Senge argues that his five learning organization disciplines could easily consider adding a leadership discipline as well. The Army's "Be, Know, Do" principle that guides the leadership model found within FM 22-100 has many parallels or similarities of the learning organization disciplines. On a cursory look, it appears that FM 22-100 is about right within the context of building leadership fit for the Objective Force.

Self-aware and adaptive leaders require feedback to make improvements in the units.

Accordingly, future leaders in the Objective Force need a system that gives them the ability to assess the performance of the unit and then make improvements. Indeed, the ATLDP Panel recognizes that efficient learning organizations have standards, assessment, and evaluation and feedback systems. All five of the Objective Force Disciplines embody the necessary tools to improve performance. In fact, these learning disciplines already exist in some units and took only unique leadership to take advantage of them.

#### A Glimmer of Hope

Even in today's Army, building a learning culture is possible. In 1995, operation JOINT ENDEAVOR<sup>87</sup> is perhaps one of the first examples of true learning within a large organization. The 1<sup>st</sup> Armored Division (Multinational Division-North), commanded by Major General

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<sup>&</sup>lt;sup>84</sup> FM 22-100, p. 1-4.

<sup>85</sup> Senge, The Fifth Discipline Fieldbook, p. 22.

<sup>&</sup>lt;sup>86</sup> *ATLDP*, p. 3.

<sup>87</sup> Starting on 14 December 1995, three Multi-National Divisions took part in operation JOINT ENDEAVOR to implement the General Framework for Peace in Bosnia-Herzegovina.

William Nash, built a learning organization centered on the brigade level. Rey to MND-North's success were frequent After Action Reviews (AAR); documenting, archiving and sharing these AARs; and analyzing the AAR data in a central facility and finally establishing a learning culture within the division. This last part is what makes Major General Nash's MND–North unique. They were able to fix a problem while executing their ongoing mission. Learning while doing took a little innovation, determination and the guiding role of leadership. The leadership recognized the importance of learning quickly and developed a system to implement meaningful change that ultimately led to the success of the mission. In doing so, they encouraged that learning from mistakes is not just good but critical to mission success and to becoming a better unit; the leadership took the first steps in establishing a learning culture.

Arthur Ashe once said "To achieve greatness: start where your are, use what you have, do what you can." Although obviously focused on the individual, this simple and powerful concept easily describes the learning organization. The beauty of this statement is circular in nature, once the cycle is complete, the user has new and better capabilities on hand to handle the next task. This is learning. Effective leaders make learning happen.

Current Army Leadership doctrine, FM 22-100, has the correct definition of leadership as it relates to learning organizations. However, as the ATLDP recognizes, FM 22-100 (soon to be FM 6-22) needs to adjust the method in which our leaders develop if they are to build a learning organization within the Objective Force. In addition, the NTC Trends Compendium shows that staffs and commanders are being overwhelmed with data as they lose focus on ISR, Situational Understanding and Decision Making.

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<sup>89</sup> Johnson, "Getting it Right Quickly", p. 6.

<sup>&</sup>lt;sup>88</sup> Johnson, Fred W., Getting it Right Quickly, *Military Review*, (Mar-Apr 2000), p. 5. Each brigade was required to conduct frequent AARs where the information was sent electronically to the division. From there it was analyzed and published every seventy-two hours in a "Lessons Learned" bulletin to all of the units. Although a simple system, it was very effective in reducing the number of mine casualties and ultimately in the successful implementation of the peace agreement by a credible force.

<sup>&</sup>lt;sup>90</sup> Hesselbein, Frances, "The Circular Organization," *The Drucker Foundation, The Organization of the Future*, (San Francisco: Jossey-Bass Publishers, 1997), p. 85.

# **OBSERVATIONS AND RECOMMENDATIONS**

"Sharing information and getting good feedback needs to be encouraged. We need to undergo change to adapt and become a knowledge-based, learning organization." <sup>91</sup>

--General John M. Keane, Vice Chief of Staff, United States Army

The answer to the research question is clear. Current Army doctrine will not enable the Objective Force in becoming a learning organization. Doctrine has a profound effect on the way The Army operates. As such, changing United States Army doctrine to shape the future performance of the Objective Force is paramount. The underlying purpose of this paper is to identify a possible doctrinal solution the Objective Force can adopt in achieving the qualities of an adaptive, dominant learning organization. The capabilities outlined in the Objective Force White Paper can be made possible by changing the current culture, one that is linear and inflexible, and adopt a set of disciplines that can influence and change the way the Army thinks. What is unclear though, is *how* culture needs to change with respect to doctrine. The proposed change that can help the Army in changing the way it thinks is the model of *Objective Force Disciplines*. The names of the disciplines are not as important as the underlying concepts and their associated definitions. These disciplines will impact culture, decision making, leadership, command, and knowledge management. If adopted, the Army and the future Objective Force could arguably have a skill that will enable them to adjust to any scenario, regardless of threat, and win decisively.

#### **Doctrine Recommendations that lead to a Cultural change**

By adopting these new Objective Force Disciplines, and over time adjusting the Army culture, there will be numerous implications and necessary changes in United States Army

<sup>91</sup> Department of the Army, *Army Knowledge Management Strategic Plan version 2.1*, (Government Printing Office, 2001), p. 5.

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doctrine. These implications and changes align with strategic objectives that can develop the Objective Force Disciplines. Certainly, this list is not all encompassing while it highlights the significant areas that need addressing if the Army wants to truly become a learning organization. The following chart depicts the concepts of generic strategies to the related Objective Force Strategy and the possible doctrinal change that can enable the associated Objective Force Discipline:

Achieving the New Objective Force Disciplines				
Generic Strategies	Objective Force Strategies	Doctrine Change		
Information Systems	Data Systems Infrastructure	New Doctrine addressing data,		
Infrastructure	(Relational Dominance)	information and decision		
		making as it relates to		
		operations. (FM 1-0, FM 3-0,		
		FM 100-6, FM 101-5)		
Intellectual Property and	Implicit and Explicit	New Doctrine emphasizing		
Knowledge Management	Knowledge Management	building Implicit and Explicit		
	(Soldier Mastery, Relational	Knowledge in the soldier and		
	Dominance, Dominant	unit.		
	Operations, Systems	(FM 3-0, FM 100-6, FM 101-5)		
	Understanding)			
Individual Learning	Soldier Learning	New Doctrine addressing		
	(Soldier Mastery)	soldier training and		
		development.		
		(FM 3-xxx, FM 22-100)		
Organizational Learning	Unit Learning	New Doctrine focusing on how		
	(Unit Vision)	visions are developed and		
		realized.		
		(FM 25-100, 25-101)		
Innovative Strategy	Leader Learning	New Doctrine describing how		
	(Soldier Mastery, Dominant	the Objective Force as a		
	Operations)	learning organization operates,		
		how the Officer Education		
		System needs to change, and		
		finally realigning branches to		
		Battlefield Functional Areas,		
		(FM 3-0, FM 22-100, FM 101-		
		5, FM 6-0)		

Figure 3. Strategy in achieving the New Objective Force Disciplines.

The generic strategies outlined above will produce the most durable and long lasting learning organization. 92 Accordingly, the Army should look into changing some of the underlying principles in its existing doctrine to reflect the Objective Force Disciplines. First, FM 1-0 should reflect that the Army is in fact a learning organization adopting new doctrine designed to give the adaptive qualities of the Objective Force. Second, adjust the last chapter in FM 3-0 to account for learning organization theory and how it interacts with information. Redefine information and knowledge as it relates to the learning organization and future conflict. A new doctrinal manual (FM 3-xxx) should reflect the concepts of the fourth discipline of *Dominant Operations* as it relates to the Unit of Action. Third, rewrite FM 101-5 (soon to be FM 5-0) to reflect decision style tactics (Relational Dominance), network centric warfare and Systems Understanding as it applies to problem solving and war fighting. Fourth, Army training doctrine needs to continue the focus on unit level execution (Unit of Action) while emphasizing that their own performance helps define the principles of operating as they relate to *Unit Vision*. Fifth, FM 22-100, critical in understanding Objective Force Disciplines, must reflect the role of leadership as it develops and articulates "guiding ideas" of vision, values and purpose. Finally, create new doctrine that focuses on dominant operations as it relates to learning organization and the new Objective Force Disciplines.

#### **Re-examine Line of Operation Seven (Doctrine)**

Within the Army Transformation Campaign Plan, Line of Operation Seven, Doctrine (LO7) needs reviewing for completeness as it relates to Objective Force projected capabilities. LO7, as developed, will not enable the Objective Force to become a learning organization. LO7 is integrating "elements of the Army Vision into fundamental war-fighting doctrine to support Legacy Forces." There are two problems with LO7. First, LO7 does not address Objective Force capabilities as outlined in the Army White Paper on the Objective Force and the Objective Force

<sup>&</sup>lt;sup>92</sup> King, William R., "Strategies for Creating a Learning Organization," *Information Systems Management*,

Concept Statement. Rather, it appears that LO7 focuses on Legacy and Interim capabilities only. Second, LO7's "Fundamental Doctrine" is incomplete while ignoring doctrine on decisionmaking (FM 101-5 soon to be FM 5-0 and FM 6-0), leadership (FM 22-100) and training (FM 25-100/101). A line of operation designed to "revise current doctrine" that does not include Objective Force concepts cannot support transformation.

# Change the way the Army uses data and knowledge

The definition of information in Army doctrinal manuals needs to change. The role of information and how it plays in decision-making is critical in understanding the benefit of the Objective Force Disciplines. In simple terms, war fighting is a function of action where action is a direct result of decision-making. Accordingly, to make decisions, a clear understanding of a situation is paramount. To achieve understanding, judgment must be applied to knowledge and information. As such, information and knowledge is central to learning organizations. With this simple logic, information is relevant data that provides meaning to a decision-maker (knowledge set).<sup>94</sup> Thus, doctrine that focuses on making decisions in all kinds of environments is critical. Analysis needs to occur at all levels, thereby refining data and giving relevant meaning to information as it clarifies the understanding of a situation. By viewing data this way, and keeping it open to as large a group as possible, units are able to achieve decision dominance, a root capability found within the *Relational Dominance*. Appendix A graphically describes the role of data, information, knowledge and understanding within an environment of the Objective Force Disciplines.

<sup>(2001),</sup> p. 16.

93 United States Army Training and Doctrine Command, presentation titled "LO7 Doctrine Development", (25 Jan 2001), p. 3. DCSDOC has identified nine volumes of doctrine that it has labeled "Fundamental Doctrine". The Fundamental Doctrine is FM 1-0 The Army, FM 3-0 Operations, FM 3-07 Decisive Operations, FM 3-40 Tactics, FM 3-50 Stability and Support Operations, FM 3-100.15 Corps Operations (soon to be FM 3-92), FM 3-100.71 *Division Operations* (soon to be FM 3-91), FM 3-35.4 *Deployment*, FM 4-0 *Combat Service Support*. 
<sup>94</sup> Sparling, Brian, In a personal discussion, this definition is the result of his monograph work and is useful in explaining the problems within the command and control organization.

The management and use of knowledge within the Objective Force is paramount in achieving the quality of firsts; See First, Know First, Understand First and Act First. The implied message in the quality of firsts is dominance of action. There is abundant literature about information and knowledge in future conflicts, and the overwhelming message is this: knowledge is the lifeblood of an organization (networked, learning or hierarchical) leading to decision-making resulting in action and thus power. The challenge for the Objective Force is to harness knowledge and use it in a dominant manner. Without knowledge, data becomes meaningless and overwhelming. Without knowledge, soldiers and units do not know which data is useful in a given context and consequently attempt to "manage" all data. Data can easily overwhelm an organization as evidenced by recent observations found in the NTC Trends Compendium. Fortunately, the Army is developing emerging doctrine to address the importance of knowledge within the organization and the soldier. Army Knowledge Management, (AKM), is the Army strategy to transform itself into a network-centric, knowledge-based force. The purpose of AKM is to develop and improve "decision dominance" within the Army and its organizations in all spectrums of conflict. The purpose of of the objective force is about a spectrum of conflict.

In developing the Army as a knowledge-based organization, the AKM Strategic Plan has five simultaneous objectives that support three underlying principles: Change Catalysts, Intellectual Capital and Infostructure.<sup>98</sup> The five simultaneous objectives are:

- 1) Adopt governance and *cultural changes* to become a knowledge-based organization.
- 2) Integrate knowledge management concepts and best business practices into Army processes to improve performance.
- 3) Manage the infostructure as an enterprise to enhance capabilities and efficiencies.

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<sup>95</sup> Arquilla, John and Rondfeldt, David, In Athena's Camp, (RAND, 1997), p. 141-164.

<sup>&</sup>lt;sup>96</sup> Department of the Army, *FM 3-0 Operations*, (Washington D.C.: Government printing Office, 2001), p. 11-6. What the Army calls Information Management (IM), part of a three tiered structure that leads to information superiority. The other two tiers are Intelligence, Surveillance, Reconnaissance (ISR) and Information Operations (IO).

<sup>(</sup>IO).

97 Department of the Army, *Army Knowledge Management Guidance Memorandum Number 1*, (Washington D.C.: Government Printing Office, 2001), p. 1.

98 Department of the Army, *Army Knowledge Management Strategic Plan, version 2.1*, (Washington D.C.:

<sup>&</sup>lt;sup>98</sup> Department of the Army, *Army Knowledge Management Strategic Plan, version 2.1*, (Washington D.C.: Government printing office, 2001), p. 4.

- 4) Institutionalize Army Knowledge Online as the Enterprise Portal to provide universal, secure access for the entire Army.
- 5) Harness Human Capital for the Knowledge-Based Organization. 99

The first objective is paramount to success. In fact, the AKM strategic plan recognizes that "the organizational structure to institutionalize AKM principles and methodologies must be established."<sup>100</sup> Adopting a cultural belief that embraces these concepts is an absolute must. The Objective Force Disciplines embody a learning culture.

#### **Outside the Box**

If the United States Army truly wants to change its culture and "think differently" then some hard choices need be made. While this paper focuses on doctrinal recommendations, there are some dramatic changes involving command, staff, branches, organization and operations that can help the Army as it transforms.

The first step starts at the top; senior leadership must be comfortable with a learning culture. In that, commanders should encourage new ways of thinking, analysis and communicating. Senior leaders need to communicate to the staff exactly how it is they make decisions. Decision-making skills are unique to each individual, as such; leaders (or the prime decision maker) should communicate how it is they assess a situation to gain an understanding before making a decision. Conversely, staffs need to know explicitly how the leadership makes decisions. Senior Leaders should maintain the appropriate focus on the big picture thereby enabling them to achieve an understanding quicker.

Second, unit organization should change to reflect the <u>entire spectrum</u> of see first, understand first and act first, specifically understanding first. Most of the current Objective Force advances focus on sensor technology (see) and shooter technology (act) while <u>little</u> is focused on

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<sup>&</sup>lt;sup>99</sup> Army Knowledge Management Strategic Plan, version 2.1, p. 15.

<sup>&</sup>lt;sup>100</sup> Army Knowledge Management Strategic Plan, version 2.1, p. 16.

understanding. Understanding is more than just gathering data, transmitting it to the TOC and then projecting icons onto a common operating picture. Understanding requires human analysis. Analysis requires education, training and practice. Accordingly, staffs should organize with the correct amount of personnel within the staff to do the job. At the Unit of Action level (Brigade and below), staffs should be robust enough to analyze data quickly without confusion and communicate it clearly. This is necessary, because the little time available for complex decisions requires instinct based on implicit knowledge.

Third, change the orders production process. At the Unit of Action level, there should be more command and less control. Accordingly, mission type orders with clear intents, task and purposes, and decision matrixes should be the rule. If the unit has trained long enough together as a team, and has a clear *Unit Vision*, then all other actions could be standard operating procedures.

Fourth, soldier and leader assignments should be longer at the Unit of Action level. Since, rapid decision making and action reside primarily at the Unit of Action level, and that these decisions require an almost second hand nature (implicit) of understanding between the staff and leader, the time spent in a unit needs to be longer. The benefit of training habitually with the same soldiers in same unit under the same command is cohesiveness. The new benefit is the established level of implicit knowledge in the unit and the soldier resulting in quicker decisions.

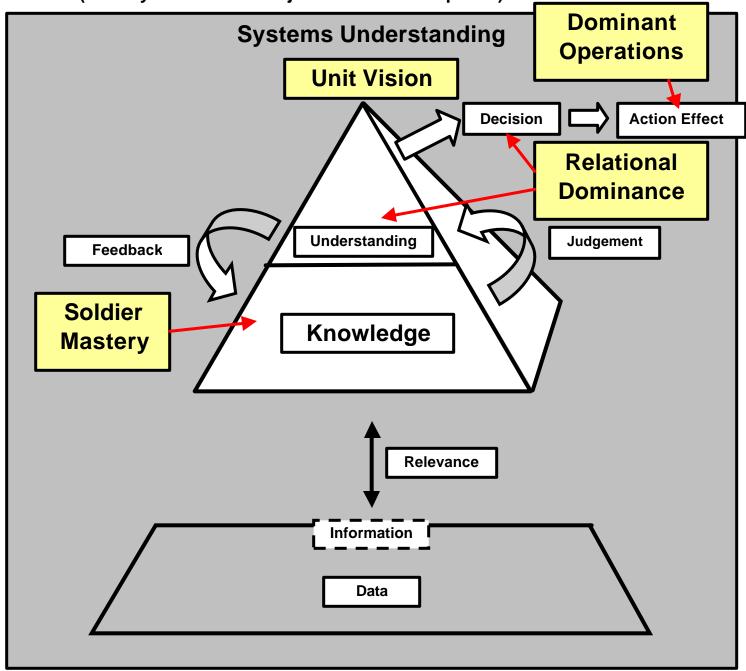
Finally, realign branches with the new Battlefield Functional Areas (BFAs). Much of the resistance to change as it relates to the Objective Force rests within the parochial stances of the branches.

#### Conclusion

The challenge that faces the United States Army as it attempts to transform itself centers on cultural biases as much as around technological advances. Specifically, the Army and its leaders should put more command and less control back into itself and not get tied down with step by

step processes that, although extremely useful in problem solving, can cripple an organization in a world largely dominated by data. The fact that the Army's current doctrine is lacking and its emerging initiatives are relevant to learning suggests that the Army is on the right path to building a learning organization. However, it will take time to change the current cultural biases that reflect current doctrine. Therefore, if the Objective Force (and the Interim Force) is to achieve a new way of thinking leading to dominant and decisive victory, then current Army doctrine should change now and reflect the Objective Force Disciplines.

APPENDIX A: Data, Information, Knowledge and Understanding (As they relate to the Objective Force Disciplines)



Information is data that is relevant and meaningful to a Knowledge Set.

-Bryan Sparling

# **APPENDIX B: NTC Trends Compendium Excerpt**

Intelligence Battle Operating System			
Trend: Reconnaissance and Surveillance plan Development and Execution.	Observation: TF commanders, S3s and S2s routinely have problems developing reconnaissance and surveillance (R&S) plans that answer the commander's priority intelligence requirements (PIRs).	Discussion: The situational template (SITEMP) is not complete; R&S plans not developed throughout entire zone; lack of commander input in PIR development; seldom any parallel coordination within the brigade; units lack understanding of the technical capabilities of unit.	

Command and Control Battle Operating System			
Trend: Battle Tracking	Observation: Task Force	<b>Discussion</b> : There is a	
and Situational Awareness.	TOCs too often do not have established procedures for information display, message handling, and battle tracking. The main CP staff does not provide the task force commander adequate predictive analysis during operations.	lack of training on information management; most units do not know what information to track; units often track information that is not critical, are unable to identify information that is critical or attempt to track an overabundance of information that makes it	
		unmanageable.	

Command and Control Battle Operating System			
Trend: Rehearsals.	Observation: Rehearsals lack	<b>Discussion</b> : Rehearsals	
	depth, synchronization, and	reflect a lack of a base	
	understanding; rehearsals tend	understanding between	
	to become wargaming efforts;	units and within units;	
	combined arms rehearsals do	rehearsals often make up	
	not result in a synchronized	for a lack of wargaming	
	plan that all subordinates and	resulting in a loss of focus	
	leaders clearly understand	and understanding	

# **APPENDIX C: Army Training and Leader Development Panel Excerpt**

#### What the Field told us

- While fully recognizing the requirements associated with a career in the Army, officers
  consistently made comments that indicate the Army Culture is out of balance and outside
  their Band of Tolerance. They cited:
  - There is an undisciplined operational pace that affects every facet of Army life.
     Officers characterize it as too many short-term, back-to-back deployments and
     exercises, trying to do too much with available resources, too many non-mission and
     late taskings, too many directed training events, and senior leader "can do" attitudes
     that put too much on the plate. This impacts predictability in their professional and
     personal lives and the lives of their families.
  - The Army expects more commitment from officers and their families than it currently provides.
  - The Army is not meeting the expectations of officer cohorts. Junior officers are not receiving adequate leader development experiences. Many captains and majors do not perceive a reasonable assurance of a future because of the Army's CGSOC selection policy. Many retirement eligible lieutenant colonels and colonels do not feel valued for their experience and expertise.
  - Top-down training directives and strategies combined with brief leader development experiences for junior officers leads to a perception that micromanagement is pervasive. They do not believe they are being afforded sufficient opportunity to learn from the results of their own decisions and actions.
  - There is diminishing, direct contact between seniors and subordinates. This is
    evidenced by unit leaders who are often not the primary trainers, leaders who are
    often not present during training, leaders who are focused up rather than down, and
    leaders who are unwilling to turn down excessive and late taskings. This diminishing
    contact does not promote cohesion and inhibits trust.
  - Most officers have not fully embraced the current officer efficiency report. They do not like the term center of mass, forced distribution, and senior rater profile management strategies.
- In the area of leader development, the field raised the following issues:
  - Personnel management requirements drive operational assignments at the expense of quality developmental experiences.
  - Officers are concerned that the officer education system (OES) does not provide them the skills for success in full spectrum operations.
- In the area of training, officers said:
  - The Combat Training Centers are a great training and leader development experience, one the Army must sustain.
  - Army training doctrine is fundamentally sound, but must be adapted to reflect the operational environment and the tools required to train in that environment.
  - Units cannot execute home station training in accordance with Army training doctrine because of the undisciplined application of that doctrine, resource shortages, and limited training aids, devices, simulators, and simulations (TADSS).

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